

ABSTRACT OF THE INVENTION

The present invention is directed to a structure for coupling a plug connector to a receptacle connector by simply pushing the plug connector to lock into place on a receptacle connector and pull the coupling nut to release. Although the action of the push to lock and pull to release is not unique to the connector industry, the present invention is unique in that the plug and receptacle connectors are locked from relative circumferential motion or axial motion to each other when coupled. The connector in a locked mated condition prevents relative motion during high shock and vibration applications. This is achieved by making surface contact between the plug connector and the receptacle connector with a considerable force. Advantageously, the locking condition of the mated connector protects the electrical contacts from excessive wear created when relative motion exists between the plug connector and the receptacle connector, thus preventing loss of continuity, excessive heating and even combustion due to excessive heating.